(19) World Intellectual Property Organization

International Bureau



(43) International Publication Date 25 August 2005 (25.08.2005)

PCT

(10) International Publication Number WO 2005/077992 A1

(51) International Patent Classification⁷: C08L 23/08, 23/14

C08F 10/00,

(21) International Application Number:

PCT/EP2005/000708

(22) International Filing Date: 25 January 2005 (25.01.2005)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 10 2004 006 817.8

10 2004 000 017.8

11 February 2004 (11.02.2004) DE 4 March 2004 (04.03.2004) DE

60/550,189

lesignated States except US): BASELL

- (71) Applicant (for all designated States except US): BASELL POLYOLEFINE GMBH [DE/DE]; Brühler Strasse, 50389 Wesseling (DE).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): BERTHOLD, Joachim [DE/DE]; Am Flachsland 54, 65779 Kelkheim (DE). ALT, Frank, Peter [DE/DE]; Amtsgasse 3, 65929 Frankfurt am Main (DE). EVERTZ, Kaspar [DE/DE];

Hauptstrasse 35F, 65843 Sulzbach (DE). KÖLLE, Peter [DE/DE]; Kirschblütenweg 7, 50996 Köln (DE).

- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: PROCESS FOR PREPARING POLYOLEFINS IN SUSPENSION

(57) Abstract: The invention relates to a continuous process for preparing polyolefins having a bimodal or multimodal molar mass distribution in suspension in at least two reactors R1, R2.x, R3.y which are connected in series and in which different reaction conditions are set. In this process, the offgases Al, A2.x, A3.y, A4 and A5 leaving all the reactors connected in series are firstly collected, the collected offgases are then compressed in a compression stage 10, the compressed offgases are subsequently cooled and the cooled material is separated into a gaseous fraction and a liquid fraction. The separated fractions are then recirculated to the polymerization process at different points. The process of the invention allows the total conversion of the polymerization, based on monomer and comonomer used, to be increased to a surprising extent.

